

FINAL ENVIRONMENTAL ASSESSMENT**Magma Energy (U.S.) Corp.
McCoy II Geothermal
Exploration Project****NVN-88129X****Finding of No Significant Impact**

DOI-BLM-NV-C010-2011-0514-EA

October 2011

**FINDING OF NO SIGNIFICANT IMPACT
MCCOY II GEOTHERMAL EXPLORATION PROJECT
CHURCHILL COUNTY, NEVADA**

**Environmental Assessment
DOI-BLM-NV-C010-2011-0514-EA
McCoy II Geothermal Unit NVN-88129X**

BACKGROUND

Magma Energy U.S. Corp. (Magma) has proposed geothermal exploratory drilling and testing within the boundaries of the McCoy II Geothermal Unit, NVN-88129X (Unit) in Churchill County, Nevada. This exploration project will involve portions of geothermal leases NVN-85725; NVN-85726; NVN-85727; NVN-86905. Currently the details of the Proposed Action are specified in the McCoy Geothermal Exploration Project Operations Plan (OP) submitted to BLM by Magma. The OP proposes geothermal exploration well drilling on nineteen (19) new well pads located on federal geothermal leases.

The Proposed Action is within federal lands, managed by the Bureau of Land Management Carson City District Office (BLM). The purpose of the Proposed Action is to develop the geothermal resource within the Magma McCoy II Geothermal Unit area in response to Executive Order (EO) 13212, which directs the BLM in a timely manner to support efforts to increase energy production from federal minerals, while preserving the health of public lands.

The Environmental Assessment (EA) Magma Energy (U.S.) Corp. McCoy II Geothermal Exploration Project NVN-88129X, DOI-BLM-NV-C010-2011-0514-EA evaluated the impacts on the natural and human environment that could result from implementation of this geothermal exploration project. The impact analysis in the EA characterizes the potential for impacts, from the Proposed Action, for each resource in the project area. The determination of environmental risk is resource-specific and is based on a number of factors, including the presence and extent of resources within the federal geothermal leases associated with the Proposed Action, the extent of resources in the surrounding area, and the quality of existing data.

FINDING OF NO SIGNIFICANT IMPACT

Based on the analysis of the Magma energy (U.S.) McCoy II Geothermal Exploration Project, DOI-BLM-NV-C010-2011-0514-EA and its associated administrative record, it is my determination that the implementation of the Proposed Action, excepting surface disturbance on the road to Pad E, is not a major federal action and will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area and an environmental impact statement (EIS) will not be prepared. The Proposed Action has been reviewed for conformance with the Carson City Field Office Consolidated Resource Management Plan (2001) and is found to be consistent with current BLM policies, plans and programs. The Proposed Action is consistent with Churchill County ordinances, policies and plans.

CONTEXT AND INTENSITY

This finding and conclusion is based on the consideration of the Council on Environmental Quality's (CEQ) criteria for significance (40 CFR 1508.27), both with regard to the context and the intensity of impacts described in the EA or as articulated in the letters of comment.

Context:

Magma possesses federal geothermal leases on BLM administered lands and is proposing to explore for geothermal resources. The Proposed Action would be drilling into and testing of the geothermal resources within the McCoy II unit area.

The EA disclosed that impacts to known cultural sites would occur with surface disturbance to the road to Pad E.

Conditions of Approval are attached hereto as Exhibit B.

The Final EA has been revised to show the Supplemental Authority, Air Quality section as present and not affected. With the implementation of the protection measures described in the Proposed Action in Chapter 2.0, Section 2.1.5.1 – Air Quality, measurable impacts are not anticipated with this exploration drilling project.

Also the Wastes, Hazardous or Solid section of the Supplemental Authorities Table 6 has been changed to show these types of materials may be present but are not affected. With implementation of the environmental protection measures and Best Management Practices described as part of the Proposed Action – see section 2.1.5.7, there is no effect.

With regard to U.S. Army Corp of Engineers jurisdictional waters of the United States, there are none as defined in COR federal regulations.

Intensity:

The Council on Environmental Quality (CEQ) regulations includes the following ten considerations for evaluating intensity:

1) Impacts that may be both beneficial and adverse.

Impacts to known cultural sites would occur with surface disturbance to the road to Pad E. Excepting the road to Pad E, none of the environmental effects discussed in detail in the EA are considered significant, nor do the effects exceed any known threshold of significance, either beneficial or adverse. The Proposed Action is geothermal exploration drilling and construction of nineteen (19) well pads, as well as reclamation of these disturbances if the wells are not developed. The EA evaluated both beneficial and adverse impacts. I have determined that none of the direct, indirect or cumulative impacts associated with the Proposed Action are significant, individually or combined.

2) The degree to which the selected alternative will affect public health or safety:

The Proposed Action is to drill into and test the geothermal resources in the project area analyzed in the EA. It is reasonable to expect further resource exploration and development which could affect public health or safety but those types of activities would be subject to further environmental analysis when considered. These types of issues could be addressed

through conditions of approval for further exploration and development actions as determined by federal and state agencies.

3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farm lands, wetlands, wilderness, wild and scenic rivers, or ecologically critical areas.

The BLM has considered the Area of Potential Effects (APE) relative to cultural resources and historic properties, providing oversight for a full inventory of the areas that include construction of the proposed well pads and access roads and their associated activity. Based on the cultural inventory, BLM determined that historic properties are present in the APE and Magma shall avoid these sites. There are no park lands, prime farm lands, wild and scenic rivers or ecologically critical areas in or near the sites proposed.

Impacts to known cultural sites would occur with surface disturbance to the road to Pad E.

4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effects of the Proposed Action on the human or natural environment were determined to be negligible. Drilling for geothermal resources and its potential effects on the subsurface in this project area has been demonstrated through the effects analyzed in this EA. No unresolved issues have been identified following public notification of the Proposed Action.

5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The Proposed Action is not unique or unusual. The action described in the EA is drilling for geothermal resource. There are no predicted effects on the human environment that are considered highly uncertain or involve unique or unknown risks. Public comment has been minimal.

6) The degree to which the action may establish a precedent for future actions with significant effects or presents a decision in principle about a future consideration.

As exploration advances and additional development of energy generation facilities is proposed on a geothermal lease, an environmental analysis maybe warranted to assess impacts resulting from these types of projects. The progression of the project from leasing to exploration to development is customary and expected.

7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

Resource values, as identified in this EA, were evaluated for cumulative impacts and determined that cumulative impacts would be negligible for the proposed exploration project. Subsequent actions for geothermal resource exploration and/or development would be evaluated for cumulative impacts in associated environmental analysis that maybe warranted and would be addressed through mitigation of the proposed future action and conditions of approval.

8) The degree to which the action may adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

As described in the EA, the project will not adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places, nor will it cause loss or destruction of significant scientific, cultural, or historical resources because all activity is subsurface.

Impacts to known cultural sites would occur with surface disturbance to the road to Pad E.

9) *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under ESA of 1973.*

As described in the EA, no known threatened or endangered species or critical habitat has been identified in the surface area considered in the EA. No BLM sensitive species were observed during surveys conducted in 2009 and two soaring golden eagles were identified in the survey conducted in 2010. The project area is within the Desatoya and Clan Alpine Sage-grouse Population Management Units (PMUs) and NDOW has delineated the area as late summer and winter range (NDOW, 2010a). However, recent fires in the area have fragmented and degraded the habitat into unsuitable habitat for sage-grouse needs. The nearest documented pygmy rabbit locations are 20 miles north of the project area in the Fish Creek Mountains (NDOW, 2010). Any future exploration and development actions would be evaluated in a future environmental analysis for the future project.

10) *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

The Proposed Action is in compliance with the CRMP. As described in the EA, the Proposed Action does not violate any known Federal, State, or local law or requirement imposed for protection of the environment. Resource specialists from the BLM Stillwater Field Office, the State of Nevada, Churchill County, the U.S. Fish and Wildlife Service and the Fallon Paiute-Shoshone Tribe were notified of the proposal.



Teresa J. Knutson
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10/18/2011
Date